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| APPLICATION NO.  | FILING DATE                   | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------------------------|----------------------|---------------------|------------------|
| 10/004,192   | 10/004,192 10/31/2001 Richard |                      | 10017555-1          | 5757             |
| 7590 07/13/2005  |                               |                      | EXAMINER            |                  |
| HEWLETT-PACKARD COMPANY  |                               |                      | NANO, SARGON N      |                  |
| Intellectual Property Administration P.O. Box 272400 Fort Collins, CO 80527-2400 |                               |                      | ART UNIT            | PAPER NUMBER     |
|  |                               |                      | 2157                |                  |

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.  | Applicant(s)         |  |  |  |  |
|---|--|----------------------|--|--|--|--|
|   | 10/004,192   | TARQUINI, RICHARD P. |  |  |  |  |
| Office Action Summary   | Examiner   | Art Unit             |  |  |  |  |
|   | Sargon N. Nano   | 2157                 |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |  |                      |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |  |                      |  |  |  |  |
| Status  |  |                      |  |  |  |  |
| <u> </u>  | 1) Responsive to communication(s) filed on 29 April 2005.                      |                      |  |  |  |  |
| 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.   |  |                      |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |  |                      |  |  |  |  |
| closed in accordance with the practice under E  | x parte Quayle, 1935 C.D. 11,  | 433 O.G. 213.        |  |  |  |  |
| Disposition of Claims   |  |                      |  |  |  |  |
| 4) ⊠ Claim(s) <u>1 - 20</u> is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1 - 20</u> is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/o   | vn from consideration.   |                      |  |  |  |  |
| Application Papers  |  |                      |  |  |  |  |
| 9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |  |                      |  |  |  |  |
| Priority under 35 U.S.C. § 119  |  |                      |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>  |  |                      |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date   | 4)  Interview Summa<br>Paper No(s)/Mail<br>5)  Notice of Informa<br>6)  Other: |                      |  |  |  |  |

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### **Response to Amendment**

This action is responsive to amendment filed on March 29, 2002. Claims 1 – 20 are pending examination.

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,10 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Humes U.S. Patent No.5, 996,011.

Humes teaches a system and method for restricting access data to data received over a network by filtering certain data received (see abstract).

As to claim1, Humes teaches a method for Uniform Resource Locator (URL) filtering, comprising: receiving an event notification upon the occurrence of an event associated with a received URL (see col. 2 lines 39 – 47, Humes discloses receiving of data for filtering from web pages);

searching, in response to said event notification, a lexical search tree data structure storing a plurality of URLs for said received URL( see col. 3 lines 10 – 13, Humes discloses comparing the requested URL to an "allow list"); and processing said received URL in response to said received URL not matching any of said plurality of URLs stored in said lexical search tree data structure( see col. 3 lines

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15 – 22 Humes discloses if the URL is not found then the requested URL is compared to "deny list").

As to claim 10, Humes teaches a system for Uniform Resource Locator (URL) filtering, comprising: a web server operable to receive a URL request from a client (see col.2 lines 48 – 55); and a filter operable, upon receiving an event notification relating to said URL request from said web server, to search a lexical search tree data structure storing a plurality of URLs for said received URL, said filter further operable to process said received URL in response to said received URL not matching any of said plurality of URLs (see col.3 lines 50 - 67).

As to claim 11, Humes teaches the system of claim 10, wherein said event notification relates to an event selected from the group consisting of a URL map event and a receive raw data event (see col. 11, lines 17 – 29).

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 2 9 and 12 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humes in view of Meyerzon, U.S. Patent No. 6,631,369 (referred to hereinafter as Meyerzon).

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As to claim 2, Humes teaches determining a branch associated with a root node of said lexical search tree data structure corresponding to said branch along with said root node representing at least one URL of said plurality of URLs, said branch having one or more leaf nodes linked hierarchically to one another, each leaf node representing an element of said at least one URL; and traversing only said branch to find a match between said at least one URL and said received URL (see col. 3, lines 50 – 67)

Humes does not teach hash value, however Meyerzon teaches a set of one or more hash values that corresponds to the root certificate being updated (see col. 7 lines 45 – 47). It would have been obvious to one of the ordinary skill in the art at the time of the invention to include hash values that correspond to root certificate to insure the security of transmitted data.

As to claim 3, Meyerzon teaches the method of claim 2, wherein said determining a hash value comprises:

determining a first element of said received URL (see col. 7 lines 45 - 47); and determining a hash value for said first element ( see col. 7 lines 45 – 47 and fig. 3, Meyerzon discloses a trust list indicating one or more hash values).

As to claim 4, Humes does not explicitly teach the limitation hash value being ASCII code. Official Notice is taken as evident by Microsoft Computer Dictionary 5<sup>th</sup> Edition that it would have been obvious for one of the ordinary skill in the art at the time of the invention to modify Humes by using ASCII code because doing so would allow the data transmission among disparate hardware and software to be standardized.

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As to claim 5, Meyerzon teaches the method of claim 2, wherein said traversing only said branch comprises comparing successive elements of said received URL with successive elements of said at least one URL stored in successive leaf nodes of said one or more leaf nodes so long as said successive elements of said received URL match said successive elements of said at least one URL (see col. 3 lines 27 – 42).

As to claim 6, Meyerzon teaches the method of claim 2, wherein said traversing only said branch further comprises:

determining a twig associated with said branch at a point of divergence between said at least one URL and said received URL, said twig representing a terminating substring of a second URL of said plurality of URLs (see col. 9 lines 1 - 9); and

traversing said twig to find a match between a terminating substring of said received URL and said terminating substring represented by said twig (see col. 9, lines 45-51).

As to 7, Meyerzon teaches the method of claim 6, wherein said traversing said twig comprises comparing successive elements of said terminating substring of said received URL with successive elements of said terminating substring of said second URL represented by said twig so long as said successive elements match (see col. 9, lines 45-51).

As to claim 8, Meyerzon teaches the method of claim 5, wherein said traversing only said branch further comprises: setting a current node pointer to point to a leaf node of said one or more leaf nodes; setting a target signature pointer to point to an element of said received URL (see col.9, lines 54-60);

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in response to a value of said leaf node pointed to by said current node pointer being equal to a wild card character and a value of the element pointed to by said target signature pointer being equal to a value of the next leaf node following the leaf node pointed to by said current node pointer, updating said current node pointer to point to a leaf node following said next leaf node(see col. 3. line 42 – 48).

As to claim 9. Meyerzon teaches the method of claim 1, wherein said receiving said event notification comprises receiving said event notification upon the occurrence of an event selected from the group consisting of a URL map event and a receive raw data event (see col. 11, lines 17 - 29).

As to claim 12. Humes teaches determining a branch associated with a root node of said lexical search tree data structure corresponding to said branch along with said root node representing at least one URL of said plurality of URLs, said branch having one or more leaf nodes linked hierarchically to one another, each leaf node representing an element of said at least one URL; and traversing only said branch to find a match between said at least one URL and said received URL (see col. 3, lines 50 - 67)

Humes does not teach hash value, however Meyerzon teaches a set of one or more hash values that corresponds to the root certificate being updated. It would have been obvious to one of the ordinary skill in the art at the time of the invention to include hash values that correspond to root certificate to insure the security of transmitted data.

As to claim 13, Meyerzon teaches the system of claim 12, wherein said means for determining a hash value comprises:

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means for determining a first element of said received URL(see col. 7 lines 45 - 47); and

means for determining a hash value for said first element ( see col. 7 lines 45 – 47 and fig. 3).

As to claim14, Meyerzon teaches the system of claim 13, wherein said means for traversing only said branch comprises means for comparing successive elements of said received URL with successive elements of said at least one URL stored in successive leaf nodes of said one or more leaf nodes so long as said successive elements of said received URL match said successive elements of said at least one URL (see col. 3 lines 27 – 42).

As to claim 15, Meyerzon teaches the system of claim 14, wherein said means for traversing only said branch further comprises: means for determining a twig associated with branch at a point of divergence between said at least one URL and said received URL, said twig representing a terminating substring of a second URL of said plurality of URLs (see col. 9 lines 1 - 9); and means for traversing said twig to find a match between a terminating substring of said received URL and said terminating substring represented by said twig ( see col. 9, lines 45- 51).

As to claim 16, the system of claim 15, wherein said means for traversing said twig comprises means for comparing successive elements of said terminating substring of said received URL with successive elements of said terminating substring of said second URL represented by said twig so long as said successive elements match (see col. 9, lines 45-51).

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As to claim 17, Humes teaches, a method for Uniform Resource Locator (URL) filtering, comprising:

receiving an event notification from a web server upon the occurrence of a URL map event (see col. 2, lines 39 –47);

traversing only said branch to find a match between said received URL and said at least one URL(see col. 3 line 50 – 67); and

processing said received URL in response to said received URL not matching said at least one URL(see col. 3 , lines 15 – 22).

Humes teaches determining, in response to receiving said event notification, a URL received by said web server from a client (see col. 3 lines 50 - 67);

determining a branch associated with a root node of a lexical search tree data structure corresponding to lexical search tree data structure storing a plurality of URLs, said branch along with said root node representing at least one URL of said plurality of URLs, said branch having one or more leaf nodes linked hierarchically to one another, each leaf node representing an element of said at least one URL( see col.3, line 50 – 67).

Humes does not teach hash value, however Meyerzon teaches a set of one or more hash values that corresponds to the root certificate being updated (see col. 7 lines 45 – 47). It would have been obvious to one of the ordinary skill in the art at the time of the invention to include hash values that correspond to root certificate to insure the security of transmitted data.

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As to claim 18, Meyerzon teaches the system of claim 17, said receiving said event notification comprising receiving a notification parameter from said web server, said notification parameter pointing to a data structure storing said received URL (see col.4 lines 55-67).

As to claim 19, Meyerzon teaches the system of claim 17, further comprising notifying said web server of a match between said received URL and said at least one URL (see col. 3 lines 27 – 42).

As to claim 20, Meyerzon teaches the system of claim 17, further comprising: registering with a web server to receive notification upon the occurrence of said URL map event (see col. 12 lines 17 – 29).

## Response To Argument

4. Applicant's arguments filed have been fully considered but they are not persuasive.

In remarks applicant argue in substance that Humes does not disclose A) searching a lexical search tree data structure storing a plurality of URL.

In response to A) Humes discloses filtering a requested web page URL. Humes discloses a method where a URL is compared to an allow list, the mehod involves a dictionary where the text of the web page is compared to check whether it is objectionable word therefore Humes meets the scope of the limitation "searching a

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lexical search tree data structure storing a plurality of URL" (see col. 3 lines 10 – col. 4 line and figs. 2, 3 and 5).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sargon N Nano whose telephone number is (571) 272-4007. The examiner can normally be reached on 8 hour.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sargon Nano July 11, 2005

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